a) Amendments to the Specification

The paragraph beginning at line 5, page 1 of the specification is amended as follows:

The application is a divisional application of U.S. Application Serial No. 09/997,785, NOW U.S. PATENT No. 6,682,859 filed November 28, 2001, entitled *Vacuum Ultra-Violet Transmitting Silicon Oxyfluoride Lithography Glass*, by Lisa A. Moore and Charlene Smith, which is ~~The application is~~ a continuation-in-part to U.S. Application Serial No. 09/799,987, filed March 6, 2001, NOW U.S. PATENT NO. 6,492,072 entitled *Vacuum Ultra-Violet Transmitting Silicon Oxyfluoride Lithography Glass*, of Lisa A. Moore and Charlene ~~Smith.~~ Smith, which is a continuation application of United States Patent Application Serial No. 09/397,573 filed on September 16, 1999, NOW U.S. PATENT NO. 6,242,136 entitled *Vacuum Ultra-Violet Transmitting Silicon Oxyfluoride Lithography Glass*, of Lisa A. Moore and Charlene Smith, which claims priority to United States Provisional Serial No. 60/135,270 filed May 21, 1999 and United States Provisional Serial No. 60/119,805 filed February 12, 1999, all of which benefit of priority is claimed.

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Moore and Charlene Smith, to U.S. Application Serial No. 09/397,572, filed September 16, 1999, Now U.S. Patent No. 6,319,634 entitled *Projection Lithography Photomasks And Method Of Making,* of George Berkey, Lisa A. Moore and Michelle D. Pierson, and U.S. Application Serial No. 09/397,577 filed September 16, 1999, Now U.S. Patent No. 6,265,115 entitled *Projection Lithography Photomask Blanks, Preforms and Method of Making,* of George Berkey, Lisa A. Moore and Charles C. Yu, are hereby incorporated by reference.

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Refractive optics requires materials having high transmittance. For semi-conductor applications where smaller and smaller features are desired at the 248 and 193 nm wavelengths, high purity fused silica has been show to exhibit the required minimum transmittance of 99%/cm or better.

Projection optical photolithography systems that utilize the vacuum ultraviolet wavelengths of light below 193 nm provide benefits in terms of achieving smaller feature dimensions. Such systems that utilize vacuum ultraviolet wavelengths in the 157 nm wavelength region have the potential of improving integrated circuits with smaller feature sizes. Current optical lithography systems used by the semiconductor industry in the manufacture of integrated circuits have progressed towards shorter wavelengths of light, such as the popular 248 nm and 193 nm wavelengths, but the commercial use and adoption of vacuum ultraviolet wavelengths below 193nm, such as 157 nm has been hindered by the transmission nature of such vacuum ultraviolet wavelengths in the 157 nm region through optical materials. Such slow progression by the semiconductor industry of the use of VUV light below 175 nm such as 157 nm light has been also due to the lack of economically manufacturable photomask blanks from optically transmissive materials. For the benefit of vacuum ultraviolet photolithography in the 157 nm region such as the emission spectrum VUV window of a F_2 excimer laser to be utilized in the manufacturing of integrated circuits there is a need for mask blanks that have beneficial optical properties including good transmission below 164 nm and at 157 nm and that can be manufactured economically.

The present invention overcomes problems in the prior art and provides a economical high quality improved photomask blanks and VUV transmitting lithography glass that can be used to improve the manufacturing of integrated circuits with vacuum ultraviolet wavelengths.